

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (Currently amended) An electronic estrus detection device for determining optimum breeding time in an animal, said electronic estrus detection device comprising:  
a housing for releasable placement on an animal; and  
a self-contained electronic means operatively associated with said housing for indicating optimum breeding time in the animal, wherein said self-contained electronic means detects and processes information related to number, duration, and frequency of mounts on said animal, and wherein said electronic means electronically compares detected and processed information on the animal to a predetermined pre-set threshold for number, duration, and frequency of mounts that indicates optimum breeding time, wherein only when the detected and processed information for said animal exceeds the pre-set threshold will an indication of optimum breeding time be expressed by the electronic means, and wherein the self-contained electronic means continuously detects and processes information to calculate and indicate lack of estrus, suspect estrus and optimum breeding time.
2. (Previously presented) The estrus detection device as defined in claim 1, wherein said electronic means further processes information to determine if said duration of said mounts meets a preset threshold of time and if a preset number of said mounts occur within a predetermined period of time.
3. (Previously presented) The estrus detection device as defined in claim 1, wherein said electronic means includes a microprocessor.
4. (Previously presented) The estrus detection device as defined in claim 1, wherein said electronic means includes at least one battery.
5. (Previously presented) The estrus detection device as defined in claim 1, wherein said electronic means includes a pressure sensitive switch.
6. (Cancelled)

7. (Previously presented) The estrus detection device as defined in claim 1, wherein said electronic means includes a visible display means that indicates optimum breeding time.

8. (Previously presented) The estrus detection device as defined in claim 7, wherein said visible display means is at least one LED.

9. (Previously presented) The estrus detection device as defined in claim 7, wherein said electronic means includes a visible display means that indicates mount count and hours elapsed since a first mount of sufficient amount of time to exceed a pre-set threshold of time.

10. (Previously presented) The estrus detection device as defined in claim 1, further comprising a reset means for resetting said electronic means.

11. (Previously presented) The estrus detection device as defined in claim 1, wherein the pre-set threshold for number and frequency of mounts is three mounts that occur within a four hour time period.

12. (Previously presented) The estrus detection device as defined in claim 11 wherein the pre-set threshold for number, duration, and frequency of mounts is three mounts that last at least three seconds each that occur within a four hour time period.

13. (Previously presented) The electronic estrus detection device as defined in claim 1 further comprising:  
an indicating means for indicating suspect estrus, confirmed estrus and optimum time to breed.

14. (Previously presented) The estrus detection device as defined in claim 2 wherein said optimum breeding time is a predetermined range of time from the first of said preset number of said mounts meeting said preset threshold and occurring within said predetermined period of time.

15. (Previously presented) The estrus detection device as defined in claim 13 wherein said indicating means is located on the rear of said housing.

16. (Previously presented) The estrus detection device as defined in claim 13 wherein said indicating means comprises at least one LED.

17. (Previously presented) The estrus detection device as defined in claim 13 wherein said indicating means is 3 LED's, each of said 3 LED's indicating either suspect estrus, confirmed estrus or optimum time to breed.

18. (Previously presented) The estrus detection device as defined in claim 2 wherein said preset threshold of time is about 3 seconds.

19. (Previously presented) The estrus detection device as defined in claim 2 wherein said preset number of mounts is 3 mounts and said predetermined period of time is about 4 hours.

20. (Canceled)

21. (Canceled)